

## Overview - Ecological Risk Assessment (ERA) Process

- Screening Level ERA (SLERA) completed 2011
- USEPA approves SLERA, requests Baseline ERA (BERA) Work Plan (Dec 2011)
- IP/GP submit BERA Work Plan after Slope Area Mitigation (SAM) completion (March 2013)
- USEPA approves BERA Work Plan, requests additional information prior to BERA report (May 2013)
- IP/GP submit BERA Tech Memo (May 2013)
- USEPA's BERA Tech Memo comments received (June 2013)
- USEPA comments addressed via response matrix (June 2013)
- USEPA approves BERA Report (September 2013)

#### **SLERA**

#### • Few receptors above USEPA level of 1

#### Terrestrial Receptors

COPEC	Short-Tailed Shrew	Red Fox	American Robin	Red-Tailed Hawk
Aroclor-1260	9	≤1	13	≤1
Copper	5	≤1	7	≤1
4,4'-DDD	≤1	2	≤1	≤1
4,4'-DDE	≤1	10	≤1	2
Lead	≤1	≤1	3	≤1
Vanadium	≤1	≤1	3	≤1

#### **Aquatic Receptors**

COPEC	Exposure Area	Mink	Tree Swallow
Aroclor-1260	Q Creek	2	≤1
4,4'-DDT	Delaware River	2	≤1
Lead	Delaware River	≤1	3
Lead	Unnamed Tributary	≤1	2

## BERA

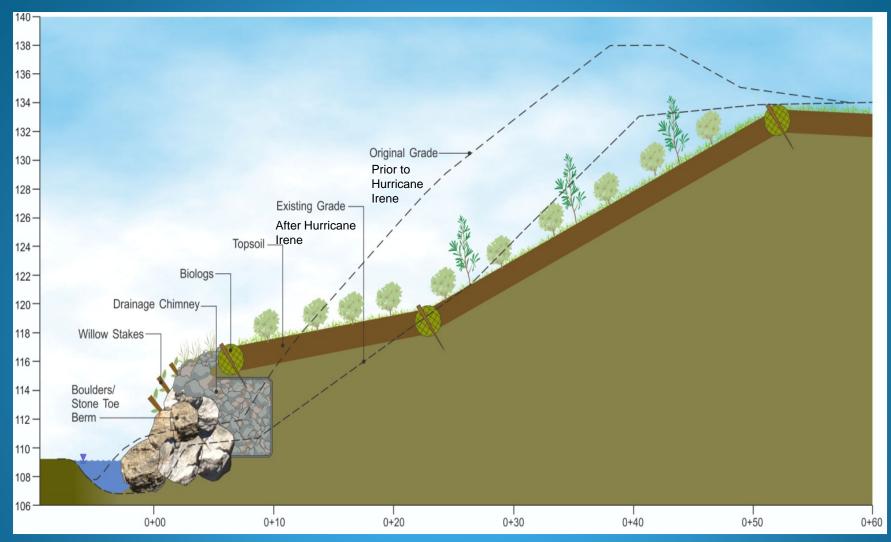
- Objective Incorporate current (post-SAM) site conditions
  - Focus on terrestrial and aquatic receptors and exposure pathways identified in SLERA
  - Use post-SAM data in exposure and risk estimates

# Q Creek Slope Area Changes



# Q Creek Slope

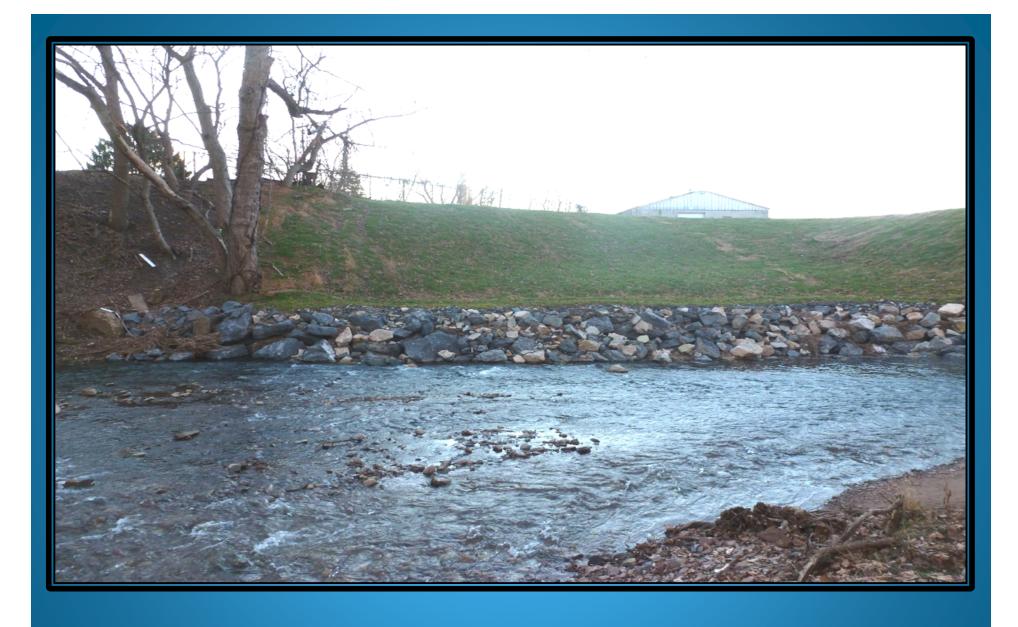
- Steep slope along southern bank of Q Creek in Coatings Facility Area (CFA)
- Following major storm events of 2011, slope instability observed
- SAM implemented 5/2012 4/2013 to stabilize bank
  - PCB-impacted soil removed
- Post-SAM data considered in BERA



**Q Creek Slope Area Mitigation – Cross-Sectional View** 



Q Creek Slope Area (October 2012)

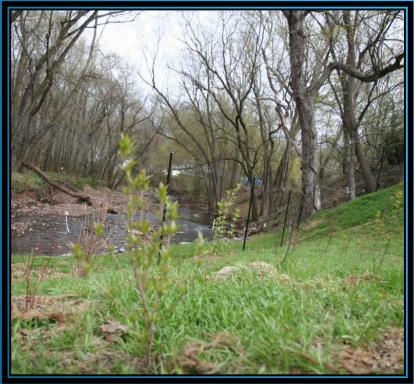


Q Creek Slope Area (January 2013)



Q Creek Slope Area (January 2013)







Q Creek Slope Area (April 2013)

# Baseline Ecological Risk Assessment (BERA)

- BERA Results
  - All of the post-SAM risk estimates are below USEPA level of 1 for terrestrial and aquatic receptors



